

Abstract

An aircraft ground power connector comprising: (a) a plurality of electrical contact pins embedded in an insulating housing having first and second layers of insulating material, wherein each pin has a male end and female end and is arranged in the housing so that the male ends are protruding from a male side of the connector, and the female ends of the pins (i) are recessed in a female side of the connector, (ii) have a shape, length, and diameter adapted to permit them to receive a male pin, (iii) have slots in the sides thereof; and the housing is a multi-layer assembly having at least two layers of insulating material arranged perpendicular to the direction of the pins; including (i) a first layer of insulating material positioned on the female side of the connector, wherein the first layer and the portion of the female end of the pins embedded therein are shaped to prevent the pin from being pushed out of the female side of the connector; and (ii) a second layer of insulating material positioned so that at least a portion of the slotted female ends are embedded therein, and the second layer is shaped so that it applies pressure to the outer periphery of the female end sufficient to reduce the size of its inner periphery; and (b) a releasable fastener that holds the first and second layers of the insulating material together.